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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/646,942   | 08/21/2003  | Yasuo Isumi          | GY0310US            | 1297             |
| 56026  | 7590        | 02/09/2006           | EXAMINER            |                  |
| YOKOI & CO. U.S.A., INC.<br>13700 MARINA POINTE DRIVE #723<br>MARINA DEL RAY, CA 90292 |             |                      | GUTIERREZ, ANTHONY  |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2857                |                  |

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/646,942

Applicant(s)

ISUMI ET AL.

Examiner

Anthony Gutierrez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 November 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-17 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/25/05.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Keenan et al. (US 6,584,413 B1).

As to claims 1, and 9-13, Keenan et al. discloses a pass/fail judgment device comprising: a discriminant function computing unit, (in the form of a histogram) for computing discriminant functions which give variables used to separate the frequency distributions of pass category and fail category from a plurality of pieces of parameter information which make pass/fail judgment factors and pass/fail judgment result information thereof (col. 1, line 54-col. 2, line 38, where the pass and fail categories are related to the purity of a substance); a statistical parameter computing unit for computing the center of distribution and distribution parameters indicating the breadth of the distribution for said variables with respect to either or both of said pass category and fail category (col. 9, lines 15 and 16, and col. 10, lines 1-16); a threshold determining unit for taking as a threshold for pass/fail judgment the value of said

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variable which gives a specific distribution probability in either or both of said categories based on said center of distribution and distribution parameters (col. 15, lines 33-45); a parameter information acquiring unit for acquiring a plurality of pieces of parameter information on pass/fail judgment objects (col. 5, lines 55-65); and a pass/fail judging unit for comparing the value of said variable obtained by substituting the parameter information into said discriminant function with said threshold and thereby makes pass/fail judgment (col. 26, line 62-col. 27, line 34). The method is implemented using spectral analysis in any available electromagnetic range (col. 3, lines 25-29).

As to claim 2, Keenan et al. discloses that the statistical parameter computing unit computes the mean and standard deviation of fail category, and said threshold determining unit takes as said threshold said variable value equivalent to a value which is away from said mean of fail category by a constant multiple of the standard deviation thereof (col. 23, line 59- col. 24, line 9).

As to claims 4-6, Keenen et al. discloses converting specified inspection data obtained as the result of inspecting a plurality of pass/fail judgment objects with a specified inspecting instrument in advance into parameters which represent different pass/fail judgment factors by a plurality of different conversion expressions, and is stored in a specified storage medium (including a hard drive), and a plurality of pieces of parameter information on pass/fail judgment objects acquired by said parameter information acquiring unit and the results of pass/fail judgment by said pass/fail judging unit are additionally stored in the specified storage medium (col. 6, lines 11-40).

As to claims 7 and 8, Keenen et al. discloses that computing discriminant functions having as a variable any of a plurality of said parameters, the discriminant function computing unit computes correlation coefficients between the parameters, counts the number of parameters which give a correlation coefficient not less than a predetermined value in said pass category and fail category, discards parameters having a high count, and repeats this processing to eliminate multicollinearity (col. 12, lines 24-38 and col. 20, line 53- col. 21, line 3).

As to claims 3, and 14-17, Keenen et al. discloses that inputted rate of flowout is obtained using a threshold range corresponding to said rate of flowout, that non-defective units are judged as defective units and that the suitability of the threshold depends on whether the threshold falls in the range from the mean to nine times the standard deviation which is considered to be the range corresponding to said rate of overcontrol (col. 15, lines 32-49).

### ***Response to Arguments***

3. Applicant's arguments filed 11/25/05 have been fully considered but they are not persuasive.

The Applicant has provided a summary of the claimed invention as it relates to a description of an embodiment in the specification.

The Applicant's specific argument regarding the rejection under 35 USC 102 (e) is that the prior art fails to teach a particular limitation.

The Applicant first cites language of the claim regarding the use of a value of a variable for a threshold, but then makes the argument that the prior art fails to teach varying a threshold based on any principle.

The Examiner maintains the position that varying a threshold and a threshold based on the value of a variable are not linguistically equivalent, and therefore considers the Applicant's arguments to regard language not present in the claims.

Furthermore, col. 23, line 67-col. 24, line 9 of the reference of rejection (Keenan et al.), addresses a "sensitivity **threshold**" calculated by multiplying a "**sensitivity constant**" times the standard deviation of the prediction residuals of a best line fitted for a selected set of components. The reference discloses (col. 24, lines 59-65) an alternative approach that provides a slider control in which the **sensitivity constant is varied** between 0 and 1. The Examiner therefore considers the reference to teach varying a threshold based on a principle, but again notes that this limitation is not recited in the Applicant's claims.

### **Conclusion**

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension

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fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Gutierrez whose telephone number is (571) 272-2215. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AG  
Anthony Gutierrez

2/2/06

  
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